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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,286	08/16/2000	Joseph M. Torgerson	10992318-1	2920

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EXAMINER

NGUYEN, LAMSON D

ART UNIT PAPER NUMBER

2861

DATE MAILED: 08/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

A/5

Office Action SummaryApplication No.
09/640,286Applicant(s)
Torgerson et al.Examiner
Lamson NguyenArt Unit
2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment dated 07/15/02.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-21 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7, 11, and 12 is/are rejected.
- 7) ☒ Claim(s) 4, 5, and 8-10 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Request for Continued Examination (RCE)

1. A request for continued examination under 37 CFR 1.114, including fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/26/01 has been entered.

Allowable Subject Matter

1. The indicated allowability of claims 1-12 is withdrawn in view of the newly discovered reference(s) to Fujimori (6,338,542). Rejections based on the newly cited reference(s) follow.

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Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-2, 7, 11-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Tajika et al. (6,089,697).

Tajika et al. teach an ink jet printhead comprising:

* a fluid ejection device coupled to an ink supply and having multiple printing modes
(figures 6, figure 24 teaches different printing modes)

* a sufficient number of ink drop generators coupled to the ink supply device and formed in the fluid ejection device and arranged along at least three axes that are substantially parallel and spaced apart from each other to provide printing resolution of at least 600 dpi with each printing mode (figure 6 teaches arrays of nozzles; figure 24 teaches fast mode of 720 dpi and also HQ mode of 720 dpi)

* the plurality of ink drop generators is arranged along four axes that are parallel and spaced transverse to each other (figure 6)

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- * a fluid reservoir containing ink that is fluidically coupled to the ink drop nozzles (figure 7)
- * the fluid ejection device is a disposable print cartridge (figure 7)
- * a carriage assembly for imparting relative motion between the fluid ejection device a print media (figure 5)
- * an ink supply device fluidically coupled to the plurality of ink drop ejectors (figure 7)
- * a controller for controlling operation of the carriage assembly (figure 5)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tajika et al. in view of Fujimori (6,338,542).

Tajika et al. teach all claimed features of the invention with the exception of:

- * the plurality of ink drop generators arranged along the at least three axes are staggered with respect to each of the axes

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Having staggered nozzles array is well-known in the art as taught by Fujimori (figure 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention to modify the invention of Tajika et al. to incorporate the teaching of staggered nozzle arrays taught by Fujimori for the purpose of varying printing pitch.

Allowable Subject Matter

5. Claims 13-21 are allowed.
6. Claims 4-5, 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamson D. Nguyen whose telephone number is (703)306-4547.



LAMSON NGUYEN
PRIMARY EXAMINER